



# A NEW HARMONABLE WAY TO CARE FOR PEACH GARDENS

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## ABSTRACT

*From the strong-growing peach to 1000 bushes per hectare (5x2 m.) By introducing a method of combined care in the article. information on the possibility of creating intensive gardens by planting seedlings. In the combined care of 3-year-old peach orchards, it is justified to apply 125 kg of pure nitrogen, 100 kg of phosphorus and 50 kg of potassium per hectare of peach orchard.*

**KEYWORDS:** *harmonized, shape, traditional, cup-shaped, Japanese method, productivity, income, profit.*

## INTRODUCTION

In the Fergana Valley, the development of advanced technologies for obtaining high yields from orchards in low-yielding areas is one of the most important tasks, as high-yielding lands are occupied mainly by cotton and cereals. conditions will be the basis.

It is known that the traditional method of caring for peaches in a bowl-shaped form can not be applied to intensive orchards, where strong grafted seedlings are placed at high densities (1000 bushes / ha). Therefore, research on the development of an improved, harmonized method using the best traditions of Japanese and Uzbek horticulture in order to create an intensive garden from strong grafted peach seedlings is of great importance.

## MATERIALS AND METHODS

The research was conducted in 2015-2017 on the basis of the methodology "Program and methods of sorting of fruit, berry and nut-fruit trees" in low-yielding, rocky soils (Orel, 1999. 606 p.).

## RESULTS AND DISCUSSION

It is known that in the Japanese method of shaping, in the first year, 2 oppositely oriented main horns are formed, the first at a height of about 40 cm and the second at a height of 60 cm. These two mother horns showed that they were not suitable for the climate of Fergana region due to the fact that they later grew to 3-3.5 meters, the fruit peel was burnt under the influence of sunlight, the branches were overgrown and a large number of poles were required.

In the "combined form" method, 3 mother branches are selected to make it easier to work between rows and to accommodate more seedlings. 60 shoots are placed, leaving the previous two mother branches at a certain distance. These branches are left 80-90 cm long each year during the next pruning period, and three parts of the tops of the branches

growing outwards are cut. Such pruning ensures the strength of the main lateral branches and the growth of secondary branches from them. This method is also used for summer pruning. Due to the compactness of the mother branches, it is possible to obtain high and high-quality crops by placing up to 1,000 strong growing seedlings per unit area. Peach orchards are pruned from the time of harvest.

Caring for a peach tree in different ways has been shown to have different effects on yield. In particular, the Japanese method of care did not suit our soil science conditions. However, the summer pruning, which is typical of the Japanese method, has served to increase productivity, showing its positive effect on the growth and development of the plant in the combined care of peaches.

In the case of the Japanese method, an average of 1.3 kg of fruit was harvested on a 3-year-old tree, while 0.26-0.0.27 kg of fruit was harvested when the peach was grown in the traditional bowl-shaped manner. Yields averaged 1.8-2.6 quintals per hectare. The best results on these indicators were achieved in trees cared for in a coordinated manner. In particular, 19-30 kg or 19-30 quintals of fruit per hectare were obtained from each bush of a 3-year-old peach tree cultivated in the new method.

A comparison of yields on the three methods showed that the Japanese method yielded 14-20 quintals less than the traditional control method, while the combined method yielded 3-7 quintals or 119-130 percent more. But a two-fold increase in the mineral fertilizer rate did not significantly affect the yield of 3-year-old trees.

Increasing the rate of fertilizer increases the yield in a bowl-like manner

It only increased to 1 quintal, and in a combined way to 3 quintals. This means that in the first three years, 125 kg of nitrogen fertilizers, 100 kg of phosphorus fertilizers and 50 kg of potassium fertilizers are sufficient to care for young seedlings in conditions of low soil fertility and rocky soils.



Also, in low-yielding soils, strong-growing seed grafts with dense, up to 1,000 bushes per hectare, combined care, had a positive effect on the rapid growth and early harvest of the plant.

Studies have shown that peach care is cost-effective. In particular, in the  $5 \times 2$  scheme (1000 bushes / ha) fed with mineral fertilizers in the amount of 125 kg of nitrogen, 100 kg of phosphorus, 50 kg of potassium. thousand soums. At the same time, the net profit was 2518 thousand soums, the profitability was the highest, ie 164%.

Although the income from doubling the amount of mineral fertilizers in the combined method reached 4,500,000 soums, the net profit from additional costs for the purchase, transportation and application of additional fertilizers amounted to 213,000 soums, with a profitability of 90 percent. In this case, for every 100 soums spent, 190 soums were earned and 90 soums of net profit was received.

When caring for young seedlings in low-fertility, rocky soils, it is advisable to apply 125 kg of nitrogen fertilizers, 100 kg of phosphorus fertilizers and 50 kg of potassium fertilizers in the first three years.

## CONCLUSION

Conclusions, suggestions and recommendations. In the conditions of low-yielding soils of Fergana region, the combined cultivation of strong-growing peaches is cost-effective. In the  $5 \times 2$  scheme, 1000 kg of nitrogen, 100 kg of phosphorus, 50 kg of potassium were fertilized with mineral fertilizers (1000 bushels/ha) soums with a net profit of 164 percent.

## REFERENCES

1. *Program and methodology for the study of fruit, berry and nut crops.* Ed. G.A. Lobanova. Michurinsk: VNIIS, 1973. 495 p.
2. *Программа и методика сортоизучения плодовых, ягодных и орехоплодных культур.* Орел: ВНИИСПК, 1999. 606 с.